

PREHISTORIC RUINS ON PUBLIC LANDS.

JANUARY 19, 1905.—Referred to the House Calendar and ordered to be printed.

Mr. LACEY, from the Committee on the Public Lands, submitted the following

REPORT.

[To accompany S. 5603.]

Your committee, to whom was referred Senate bill 5603, having had the same under consideration, report it back with an amendment to strike out all after the enacting clause and insert the following:

SECTION 1. That for the purpose of preserving and protecting from despoliation the historic and prehistoric ruins, monuments, archaeological objects, and other antiquities on the public lands of the United States, all said historic and prehistoric ruins, monuments, and other objects of antiquity are hereby placed under the care and custody of the Secretary of the Interior.

SEC. 2. That the Secretary of the Interior may make temporary withdrawals of the land on which such historic or prehistoric ruins, monuments, archaeological objects, and other antiquities are located, including only the land necessary for the preservation of such ruins and antiquities, and may make permanent withdrawals of tracts of land on which are ruins and antiquities of special importance, not exceeding six hundred and forty acres in any one place.

SEC. 3. That the Secretary of the Interior be, and he is hereby, authorized to permit examinations, excavations, and the gathering of objects of interest within such reservations by any institution, either domestic or foreign, which he may deem properly qualified to conduct such examinations, excavations, or gatherings, subject to such rules and regulations as he may prescribe: *Provided*, That the examinations, excavations, and gatherings are undertaken for the benefit of some reputable museum, university, college, or other recognized scientific or educational institution with a view to increasing the knowledge of such objects, and that the gatherings shall be made for permanent preservation and not for commercial purposes.

SEC. 4. That of all excavations and explorations made under a permit granted by the Secretary of the Interior a proper written and photographic record, with plans, shall be made at stated periods and transmitted for preservation to the United States National Museum.

SEC. 5. That the Secretary of the Interior shall make and publish from time to time such rules and regulations as he shall deem expedient and necessary for the purpose of carrying out the provisions of this act.

SEC. 6. That all persons who shall without permission appropriate, injure, or destroy any public property therein, or injure or destroy any caves, ruins, or other works or objects of antiquity therein, or commit unauthorized injury or waste, in any form whatsoever, upon the lands or objects referred to in this act, or who shall violate any of the rules or regulations prescribed hereunder, shall, upon conviction,

be fined in a sum of not more than one thousand dollars or be imprisoned for a period of not more than twelve months, or shall suffer both fine and imprisonment in the discretion of the court.

Your committee are of the opinion that the law providing for the preservation of aboriginal and prehistoric ruins on the public domain is necessary. These ruins have been frequently mutilated by people seeking the relics for the purpose of selling them. Such excavations destroy the valuable evidence contained in the ruins themselves, and prevent a careful and scientific investigation by representatives of public institutions interested in archaeology. Your committee are of the opinion that in some respects the bill as it passed the Senate is not adequate for the purpose intended, and a full hearing of persons representing various archaeological institutions has been had before your committee, resulting in the preparation of an amendment in the form of a substitute which your committee here presents.

Your committee report that the title should be amended by striking out the following: "and to prevent their counterfeiting."

Your committee also attach as an appendix a report from Prof. Edgar L. Hewett to the Commissioner of the General Land Office.

APPENDIX.

WASHINGTON, D. C., September 3, 1904.

DEAR SIR: I beg leave to hand you herewith a memorandum relative to the historic and prehistoric ruins of Arizona, New Mexico, Colorado, and Utah.

In line with our correspondence in recent years concerning the archaeology of the proposed Pajarito Cliff Dwellers' National Park, I have endeavored to secure like information of all the districts of the Southwest that are rich in prehistoric remains. These data have been compiled on the authority of our most reliable investigators, who have spent much time in the scientific study of these ruins. I refer especially to Dr. J. Walter Fewkes, of the Bureau of American Ethnology; Dr. Walter Hough, of the National Museum, and Mr. A. F. Bandelier, of the American Museum of Natural History. I have traversed a great part of this ground myself, but above my own observations I place the authority of these experts. I have also availed myself of the excellent reports of Mr. S. J. Holsinger, who has given much thought to this question.

I believe that in what is said relative to the necessity for speedy action looking toward the preservation of these ruins I reflect the sentiment of all who have seriously thought of this subject. I can testify to the general appreciation of the excellent work of your Office in this matter in recent years.

I beg leave to remain, with sincere respect,

Very truly, yours,

EDGAR L. HEWETT.

The COMMISSIONER OF THE GENERAL LAND OFFICE,

Washington, D. C.

Memorandum concerning the historic and prehistoric ruins of Arizona, New Mexico, Colorado, and Utah, and their preservation.

The importance of the large number of historic and prehistoric ruins scattered over the semiarid region of the southwestern part of the United States has gradually come to be recognized. Every cliff dwelling, every prehistoric tower, communal house, shrine, and burial mound is an object which can contribute something to the advancement of knowledge, and hence is worthy of preservation. Knowledge of the extent, location, and nature of these ruins has been accumulating for many years. We now know them to be very numerous and of great value.

The question of the preservation of this vast treasury of information relative to our

prehistoric tribes has come to be a matter of much concern to the American people. Fortunately there seems to be no barrier to the speedy accomplishment of this. By the prompt exercise of the authority lodged in various branches of the Interior Department the preservation of the ruins is assured. I shall endeavor to show that there is urgent need for the immediate exercise of this authority. This done, the work of legislation to the end that these regions may be made a perpetual source of education and enjoyment for the American people, as well as for travelers from foreign lands, may proceed with the careful deliberation which the subject demands.

Unquestionably some of these regions are sufficiently rich in historic and scientific interest and scenic beauty to warrant their organization into permanent national parks. Many others should be temporarily withdrawn and allowed to revert to the public domain after the ruins thereon have been examined by competent authority, the collections therefrom properly cared for, and all data that can be secured made a matter of permanent record.

General legislation providing for the creation and administration of such parks and providing for the excavation of ruins in the interests of science only is urgently needed. It is well known that during recent years an extensive traffic has arisen in relics from these ruins. In securing these, buildings, mounds, etc., have been destroyed. These relics are priceless when secured by proper scientific methods and of comparatively little value when scattered about either in museums or private collections without accompanying records. No scientific man is true to the highest ideals of science who does not protest against this outrageous traffic, and it will be a lasting reproach upon our Government if it does not use its power to restrain it.

With a view to furnishing concise information upon which preservative measures may be based, I have compiled the accompanying map, showing by geographical districts the location of the most important ruins in the pueblo region. My sources of information have been both official and unofficial, and the work is based upon the highest authority obtainable. However, the map is not intended to be mathematically correct. It will show approximately the location of important ruins. Some may have entirely disappeared since the maps were made from which this compilation is made, and more recent surveys might require important modifications. It may serve as a beginning for something more exact and more complete. I have prepared to accompany this a memorandum concerning the ruins located on each district, and have taken the liberty to point out how adequate protection may be afforded such as are on the public domain.

Reference to the accompanying map will show at a glance that the distribution of the prehistoric tribes of the Southwest was determined by the drainage system. The great basins of the Rio Grande, the San Juan, the Little Colorado, and the Gila constitute the four great seats of prehistoric culture of the so-called pueblo region. The remains of this ancient culture are scattered extensively over these four areas, and it is not to be hoped nor would it be a service to science to attempt to preserve all these remains. They are of the three great types, pueblo ruins, cliff houses, and cave dwellings, with their accompanying burial mounds, kivas, shrines, etc., and are practically innumerable. All measures for their preservation should look toward the encouragement of research and the advancement of knowledge and not toward its restriction. I am of the opinion that if the principal groups or districts of ruins of each great culture area can be protected by the Department of the Interior, and no excavation permitted thereon except by responsible parties bearing proper permission from the Department, the highest interests of the people will be held.

I have shown on the accompanying map that the majority of the ruins of the four great basins are embraced in twenty districts. The circles on the map are not intended to fix absolutely the boundaries of these districts. They are merely intended to show approximately how the ruins may be grouped for convenience and reference.

The districts are grouped as follows:

I. The Rio Grande basin.

1. The Pajarito Park district.
2. The Pecos Pueblo district.
3. The Gran Quivira district.
4. The Jemez district.
5. The Acoma district.

II. The San Juan basin.

1. The Aztec district.
2. The Mesa Verde district.
3. The Chaco Canyon district.
4. The Canyon de Chelly district.
5. The Bluff district.

- III. The Little Colorado basin.
 1. The Tusayan district.
 2. The Flagstaff district.
 3. The Holbrook district.
 4. The Zuñi district.
- IV. The Gila basin.
 1. The Rio Verde district.
 2. The San Carlos district.
 3. The Lower Gila district.
 4. The Middle Gila district.
 5. The Upper Gila district.
 6. The San Francisco River district.

Following is a brief memorandum showing the nature, extent, and condition of the ruins on each district:

I. THE RIO GRANDE BASIN.

This culture area, lying wholly in New Mexico, embraces the Rio Grande Valley with its tributaries from Ojo Caliente on the north to Socorro on the south and from Acoma on the west to the plains east of the Manzano Mountains.

1. *The Pajarito Park district.*—This district lies between the Rio Grande on the east and the Jemez Mountains on the west and extends from Ojo Caliente on the north to Cochiti on the south. In the northern part are the ruins of Homayo, Honiri (Ho we re) and Pose on Ojo Caliente Creek. Ten miles west, below El Rito, is the large ruin of Sepawi (Se paw we). Near the village of Abiquiu on the Rio Chama is the important ruin of Tsiwari (Tsi wa re). These are all pueblo ruins and not well preserved.

The central portion of the district is the Pajarito Park proper, the region that has for some years been under withdrawal by the General Land Office and favorably reported on for a national park, for which it has many advantages, being of great scenic beauty, accessible, and one of the richest in the Southwest in well-preserved prehistoric remains. It contains innumerable cave houses, a vast number of small pueblo ruins, and the ruins of the great communal dwellings of Puye, Otowi, Tsankiwi (Tsan ke we), Navakwi (Nay a kwe), and Pajarito or Tehrega. Vandalism has greatly diminished among these ruins since the park has been under withdrawal.

In the southern part of this district, between the Rito de los Frijoles and Cochiti, are the ruins of six pueblos, and a considerable number of cave houses, the interesting Cueva Pintada (painted cave), and the famous shrines known as the Stone Lions of Potrero de las Vacas and Potrero de los Idolos.

2. *The Pecos district.*—The principal ruins of this district are those of the old pueblo of Pecos on the abandoned Pecos pueblo grant. These are very important ruins, consisting of the two large communal houses and the remains of the old mission church, the first mission founded on the soil of the United States. These are the only ones of the numerous ruins in the upper Pecos Valley that can be preserved. All others are well-nigh obliterated.

3. *The Gran Quivira district.*—These interesting ruins lie on the plains east of the Manzano Mountains. The principal ones are those of Tabira (Gran Quivira), Abo, and Canay. All are pueblo ruins of the historic epoch, and at each place are the ruins of interesting mission churches. The ruins of this district should be officially investigated.

4. *The Jemez district.*—The ruins of 17 ancient pueblos are recorded as being located in the Jemez Valley north of Jemez pueblo. Most of them have not been accurately located. Such of them as are still preserved and on public lands are within the limits of the proposed Jemez Forest Reserve, now temporarily withdrawn. The most important ruins in the district are those of the old pueblo of Gine-wa. They lie 12 miles north of Jemez pueblo and include the ruins of the stately old mission church of San Diego de Jemez, built early in the seventeenth century, the second oldest mission church on the soil of the United States. An investigation of this district is needed.

5. *The Acoma district.*—A large number of valuable pueblo ruins are scattered over this district to the south and southwest of the pueblo of Acoma and southeast to the neighborhood of Magdalena. Many others of lesser importance are to the north and west. It is a region of great interest, the pueblo of Acoma itself being one of the most interesting objects in the southwest. Near by it is the famous Mesa Encantada. Unfortunately there has been but little investigation of this district, so that we have no important accounts of its ruins. It is a district that is greatly in need of official examination.

II. THE SAN JUAN BASIN.

The ruins of the San Juan basin consist of both large and small communal houses and true cliff dwellings in great numbers. They are scattered in numerous irregular groups over the contiguous portions of New Mexico, Colorado, Utah, and Arizona. All the ruins of the San Juan and its tributaries have suffered much from destructive collectors.

1. *The Aztec district.*—The most important ruins on this district are the group of large communal dwellings near Aztec, N. Mex. They are on private lands and well cared for, their owner apparently appreciating their value. Numerous other pueblo ruins exist in the district, but it is doubtful if any are so situated as to permit of their protection by the Government.

2. *The Mesa Verde district.*—In this district are the finest specimens of true cliff dwellings. They are very numerous in the canyons of Mesa Verde and along the Mancos River. Cliff Palace is justly one of the most famous works of prehistoric man in existence. Numerous pueblo and cliff ruins are distributed along the McElmo, the Yellowjacket, and the Hovenweep. On the whole, this is one of the most interesting of all prehistoric districts. A portion of it is under withdrawal by the General Land Office pending the creation of the Colorado Cliff Dwellings National Park. The intelligent interest of the people of Colorado has done much toward the preservation of these ruins. However, the entire district has suffered much from vandalism, a majority of the burial mounds having been destroyed. A national park in this region would be of great educational value.

3. *The Chaco Canyon district.*—This district embraces the great ruins of Pueblo Bonito, Pueblo Alto, Chetro Kettle, Hundo Pavie, Kin Kale, Una Vida, Wejegi, Kinbincola, Tuba Kin, Penasco Blanco, Kin Klizhin, Tala Kin, Kin Ya Ah, and Kin Ah Zin.

Nowhere else is there such a splendid group of prehistoric buildings in a fair state of preservation. They have been made the subject of special investigation by the Hyde exploring expedition of New York, under Dr. George H. Pepper. A splendid collection from this district is installed in the American Museum of Natural History in New York City. In due time we shall doubtless have a full report of this excellent piece of work. This district has also been made the subject of a special investigation by Mr. S. J. Holsinger, whose comprehensive manuscript report, with accompanying photographs in the office of the Commissioner of the General Land Office, affords much valuable information.

4. *Canyon de Chelly district.*—The ruins of this district are mostly in Canyon de Chelly and its tributary, Canyon del Muerto, although many others are scattered along the lower Chinlee Valley. They are, for the most part, pueblo and cave ruins. They have been specially studied and reported on by Mr. Cosmos Mindeloff. A large collection of pottery from here has recently been acquired by the Brooklyn Institute of Science and Art. The preservation of these ruins has been made a matter of special care by the Secretary of the Interior.

5. *The Bluff district.*—Comparatively little is known of the numerous ruins in southeastern Utah. They have been explored and the district mapped by Dr. T. Mitchell Prudden, of New York City, but as yet no close investigations have been undertaken. Ruins are very numerous along Montezuma Creek, Recapture Creek, Cottonwood Creek, Butler Wash, Comb Wash, and Grand Gulch. The caves of the Cottonwood and its tributaries have been investigated by the Hyde exploring expedition, and the collections therefrom placed in the American Museum of Natural History. These are important relics of ancient "basket makers."

III. THE LITTLE COLORADO BASIN.

This extensive region, embraced in the valley of the Little Colorado and its tributaries, is preeminently a region of pueblo ruins, though some cave dwellings are found. It is especially rich in prehistoric pottery. Because of its wealth of relics this region has suffered more than any other from the traffic in prehistoric wares. However, we are fortunate in that Dr. J. Walter Fewkes, of the Bureau of American Ethnology, has made the districts of the Little Colorado a subject of research for many years. His voluminous reports on this region have put us in possession of a vast amount of information on the archaeology and ethnology of the Southwest. His collections from Sikyatki for the National Museum, made in 1895 with the assistance of Mr. F. W. Hodge, of the Smithsonian Institution, together with the collections made from the Holbrook district by Doctors Fewkes and Hough, form probably the most valuable collection of prehistoric pottery in existence.

Another extensive collection of pottery from this region may be seen in the Field Columbian Museum, in Chicago.

1. *The Tusayan district.*—The Hopi Plateau is a region of pueblo ruins. The buildings are not well preserved, and there are probably no ruins in the district that demand permanent preservation. It is, however, exceedingly important that they should be protected from further unauthorized excavation. There are many ruins on the northern part of this reservation that have not been explored.

2. *The Flagstaff district.*—The important group of ruins in Walnut Canyon are good types of cliff dwellings. These have received special attention from the Secretary of the Interior. The group of pueblo ruins which lie from 5 to 15 miles northwest of Black Falls have been examined and reported on by Doctor Fewkes. He pronounces them among the most important in the Southwest. They are entirely without protection.

3. *The Holbrook district.*—This is a region of numerous pueblo ruins, some of which have been examined and reported on by Doctors Fewkes and Hough. The Museum-Gates expedition of 1901, Doctor Hough's report of which we now have, has advanced our knowledge of portions of this region very much. Doctor Hough has published particularly interesting information concerning the ruins in the Petrified Forest. The traffic in prehistoric wares from the Holbrook district has been deplorably active. Many thousands of pieces of excavated pottery have been shipped from Holbrook alone, and collections embracing several thousands of pieces are now in the hands of dealers at various towns in the district, and are offered for sale. These collections have been made, for the most part, by Indians and native Mexicans in the employ of traders, and are devoid of authentic records. The district is not rich in ruins that demand permanent protection, but it is in great need of temporary protection pending further serious investigation by competent parties.

4. *The Zuni district.*—This region is rich in both historic and prehistoric ruins. On Zuni Reservation are the ruins of the historic Seven Cities of Cibola. El Moro, or Inscription Rock, is an interesting historic monument east of Zuni, which is under temporary withdrawal by the General Land Office. The region south of Zuni to Quemado is known to be full of ruins, and traders are securing large collections of pottery therefrom at the present time. The ruins of Zuni have been thoroughly made known to us through the work of the Hemenway expedition, under the direction of the late Frank Hamilton Cushing, assisted by Mr. F. W. Hodge. The collections of this expedition are now in the Peabody Museum at Harvard University. Other important researches have been made in the Zuni district by Doctor Fewkes.

IV. THE GILA BASIN.

This is another region that embraces practically every species of prehistoric ruins. It is of vast extent and comprises, besides the valley of the Gila proper, the large valleys of the Salt and Verde rivers. As a seat of prehistoric culture it was one of the most extensive and populous. Many ruins of these three great valleys are on irritable lands, and accordingly have disappeared with the advancement of agriculture.

1. *The Rio Verde district.*—On the northern tributaries of the Rio Verde are many cliff ruins. Of these Honanki and Palatki are the most important. They are within the limits of the San Francisco Mountains Forest Reserve. There are numerous cliff ruins along Oak Creek and Beaver Creek and their tributaries. Near Camp Verde is the ruin known as Montezuma Castle, and a little further up Beaver Creek, on the Black Mesa Forest Reserve, is the interesting Montezuma Well. Mr. Mindeleff and Doctor Fewkes have made important studies and reports on the ruins of this district.

2. *The San Carlos district.*—Of the ruins on this district we have very little information beyond that obtained by Mr. A. F. Bandelier, to whose indefatigable exploration we owe so much of our knowledge of the Southwest. Both pueblo and cliff ruins are known to exist in various parts of the district, almost all of which are situated within the limits of the San Carlos Apache Reservation. Ruins are reported from near San Carlos, from various points along the Upper Salt River, on White Mountain Creek, the Carrizzo, the Cibicu, and the Pinal.

3. *The lower Gila district.*—Many ruins of this district have disappeared during recent years because situated upon agricultural land. Our archaeological knowledge of the district is due, for the most part, to the Hemenway expedition under the late Mr. Cushing, to Mr. Mindeleff, and Doctor Fewkes. The famous Casa Grande ruin has for several years been under the care of the Government. The best collection from the district is that obtained by the Hemenway expedition. It is in the Peabody Museum at Harvard University.

4. *The middle Gila district.*—The ruins of this part of the Gila Valley are mostly on agricultural lands, though many cliff ruins are known to exist in outlying districts.

Pueblo ruins are very plentiful about Solomonville, but are not well preserved. The largest is that of Pueblo Viejo. Ruins are also numerous about Clifton and along the Blue River. We have some reports on ruins of this district by Mr. Bandler and Doctor Fewkes. There is need for further investigation and report as to the present condition of these ruins.

5. *The Upper Gila district.*—It is known that there are many ruins on the Upper Gila and its tributaries near Fort Bayard, the Mimbres, and near Silver City. They are almost entirely within the Gila Forest Reserve. These ruins should be officially investigated and reported on as we have very meager information concerning them.

6. *The San Francisco River district.*—The upper San Francisco valley and its tributaries, especially the Tularosa, is full of cliff and pueblo ruins. It is almost entirely within the Gila Forest Reserve. Much of it is almost unknown country. It is in great need of further exploration. While we know of its almost innumerable ruins, we have no reports on them. The first archaeological work to be done here was that of Doctor Hough, of the National Museum, who made an expedition into this district during the past summer. Dr. Hough's report will doubtless give us much interesting information concerning the archaeology of this little-known district.

With the generous assistance of Dr. Walter Hough I have prepared a brief bibliography relative to the ruins in these various districts. No attempt has been made to make this complete. Many valuable works are omitted. The purpose of it is to direct anyone seeking information on this subject to some literature thereon. Reference to this bibliography, hereto attached, will enable anyone to secure considerable information concerning ruins or groups of ruins that have been examined and reported on.

In conclusion, I would respectfully submit the following recommendations:

1. That the authority of the Department of the Interior should be immediately exercised to protect all ruins on the public domain.

2. That the Interior Department should prohibit the collecting of prehistoric objects from public lands and Indian reservations by any person not duly furnished with a permit from the Secretary of the Interior.

3. That custodians or inspectors under the direction of the General Land Office are needed to protect the ruins in the following districts:

- (a) The Pajarito Park district, New Mexico.
- (b) The Chaco Canyon district, New Mexico.
- (c) The Mesa Verde district, Colorado.
- (d) The Bluff district, Utah.
- (e) The Holbrook district, Arizona.
- (f) The Zuni district, New Mexico.
- (g) The Rio Verde district, Arizona.
- (h) The Casa Grande district, Arizona.
- (i) The Acoma district, New Mexico.
- (j) The Middle Gila district, Arizona.
- (k) The Gran Quivira district, New Mexico.
- (l) The Jemez district, New Mexico.

With the first seven districts there is urgent need for immediate action. The eighth is already provided for. The next four are important in the order named. It would appear from general report and from the literature thereon that they are all of sufficient importance to warrant protection by the Government. At any rate, they should be examined as early as possible by competent authority and reported upon with reference to the present condition, character, and extent of the ruins.

4. That the Forestry Department, if furnished with adequate forces, could protect the ruins in the following districts which lie within forest reserves, and that provision should be made for the same as early as possible.

(a) The Flagstaff district, Arizona, including the important Black Falls group of ruins lying just above the northern boundary of the San Francisco Mountains Forest Reserve; also the ruins on the northern tributaries of the Rio Verde, lying within the same reserve, and also those of the Black Mesa Forest Reserve.

(b) The San Francisco River district, New Mexico.

(c) The Upper Gila district, New Mexico.

5. That the cooperation of the Department of Indian Affairs is needed for the protection of all ruins in the following districts:

- (a) The Pecos Pueblo district, New Mexico.
- (b) The Canyon de Chelly district, Arizona.
- (c) The Tusayan district, Arizona.
- (d) The San Carlos district, Arizona.
- (e) That part of the Zuni district, New Mexico, which lies within the Zuni Indian Reservation.

6. That there is neither economy nor efficiency in the policy of employing a custodian for a single ruin. All the ruins of any district described herein can be efficiently protected by one or two custodians or inspectors of the grade of forest rangers, who should make it known by posted notices that the excavation of ruins without the permission of the Secretary of the Interior is forbidden, and who might also examine and report from time to time upon ruins within their districts which are in need of special attention.

7. That the permanent withdrawal of tracts of land from the public domain for the purpose of protecting ruins thereon would seem to be unnecessary except where the ruins are of such character and extent as to warrant the creation of permanent national parks.

8. That there is need for general legislation authorizing the creation of such national parks and providing for the excavation of prehistoric ruins in the interests of science only.

I respectfully submit the above as a comprehensive plan for the preservation of all historic and prehistoric ruins upon the public domain and upon Indian reservations, and invite your consideration of the same. As a working plan I have no doubt it is open to much criticism, but I believe it might be made the basis for an economical and efficient method of performing this public service.

BIBLIOGRAPHY.

1. PAJARITO PARK DISTRICT.

(a) Bandelier, A. F.: Investigation Among the Indians of the Southwestern United States. Papers of the Archaeological Institute of America, Final Report, Part II, 1892.

(b) Id.: The Delight Makers, 1890.

(c) Hewett, Edgar L.: The Pajarito Park. Report of Governor of New Mexico, 1902.

(d) Lummis, Chas. F.: The Land of Poco Tiempo, 1893, page 133.

(e) Mankin, James D.: Report on the Ancient Cliff Dwellings in New Mexico, and the Proposed Establishment of the Pajarito National Park. MS. 1899, extracts. Report of Commissioner of General Land Office, 1900.

2. THE PECOS DISTRICT.

(a) Bandelier, A. F.: Report on the Ruins of the Pueblo of Pecos. Papers of the Archaeological Institute of America, American series 1, 1881.

(b) Hewett, Edgar L.: Studies on the Extinct Pueblo of Pecos. American Anthropologist, September, 1904.

3. GRAN QUIVIRA DISTRICT.

(a) Bandelier, A. F.: Final Report, Part II, 1892.

(b) Lummis, Chas. F.: The Land of Poco Tiempo, p. 285, 1893.

4. JEMEZ DISTRICT.

(a) Bandelier, A. F.: Final Report, Part II, 1892.

(b) Lummis, Chas. F.: Some Strange Corners of Our Country, 1892.

(c) Stevenson, Wm. M. C.: The Zia. Eleventh Annual Report Bureau of Ethnology, 1894.

5. ACOMA DISTRICT.

(a) Bandelier, A. F.: Final Report, Part I, 1890; also Part II, 1892.

(b) Hodge, F. W.: The Verification of a Tradition. American Anthropologist, September, 1897.

(c) Id. Same subject. National Geographic Magazine, October, 1897; also Century Magazine, May, 1898.

(d) Lummis, Chas. F.: Some Strange Corners of Our Country, 1892.

6. AZTEC DISTRICT.

- (a) Morgan, Lewis H.: Houses and House Life of the American Aborigines. Contributions to North American Ethnology, Vol. IV, 1881.
- (b) Prudden, T. Mitchell: The Prehistoric Ruins of the San Juan Watershed. American Anthropologist, April-June, 1903.

7. MESA VERDE DISTRICT.

- (a) Chapin, F. H.: The Land of the Cliff Dwellers, 1892.
- (b) Holmes, W. H.: Report on the Ancient Ruins of Southwestern Colorado. Hayden's United States Survey, 1876.
- (c) Nordenskiöld, G.: The Cliff Dwellers of the Mesa Verde. Stockholm, 1894.
- (d) Prudden, T. Mitchell: The Prehistoric Ruins of the San Juan Watershed.

8. CHACO CAÑON DISTRICT.

- (a) Holsinger, S. J.: Report on the Prehistoric Ruin of Chaco Cañon, N. Mex. M.S., General Land Office, Washington.
- (b) Jackson, W. H.: In Hayden's Report on the Geological Survey of the Territories, 1876.
- (c) Morgan, Lewis H.: Houses and House Life of the American Aborigines. Contributions to North American Ethnology, Vol. IV.
- (d) Prudden, T. Mitchell: The Prehistoric Ruins of the San Juan Watershed.

9. CAÑON DE CHELLY DISTRICT.

- (a) Mindeleff, Cosmos: The Cliff Ruins of Cañon de Chelly. Sixteenth Annual Report of the Bureau of Ethnology, 1894.
- (b) Prudden, T. Mitchell: The Prehistoric Ruins of the San Juan Watershed.

10. BLUFF DISTRICT.

- (a) Chapin, F. H.: The Land of the Cliff Dweller, 1892.
- (b) Pepper, Geo. H.: The Ancient Basket Makers of Southwestern Utah. Sup. Amer. Mus. Jour., Vol. II, No. 4, 1902.
- (c) Prudden, T. Mitchell: The Prehistoric Ruins of the San Juan Watershed.

11. THE TUSAYAN DISTRICT.

- (a) Fewkes, J. W.: Archaeological Expedition to Arizona in 1895. Seventeenth Annual Report of the Bureau of Ethnology, 1898.
- (b) Id. Preliminary Account. Smithsonian Report, 1895.
- (c) Hough, Walter: Archaeological Field Work in Northeastern Arizona. The Museum-Gates Expedition of 1901, National Museum Report, 1901.
- (d) Mindeleff, Victor: Pueblo Architecture. Eighth Annual Report of the Bureau of Ethnology, 1886.

12. THE FLAGSTAFF DISTRICT.

- (a) Fewkes, J. W.: Pueblo Ruins near Flagstaff, Ariz. American Anthropologist, July-September, 1900.
- (b) Id. Two summers' Work in the Pueblo Ruins. Twenty-second Annual Report of the Bureau of Ethnology, 1904.

13. THE HOLBROOK DISTRICT.

- (a) Fewkes, J. W.: Preliminary Account of an Expedition to the Pueblo Ruins near Winslow, Ariz., in 1896. Smithsonian Report, 1896.
- (b) Id. Two Summers' Work in the Pueblo Ruins.
- (c) Hough, Walter: Archaeological Field Work in Northeastern Arizona. The Museum-Gates Expedition, 1901. National Museum Report, 1901.
- (d) Id. Ancient Peoples of the Petrified Forest of Arizona. Harper's Magazine, November, 1902.

14. THE ZUNI DISTRICT.

- (a) Fewkes, J. W.: Reconnaissance of Ruins in or Near the Zuni Reservation. *Journal of American Ethnology and Archaeology*, vol. 1.
- (b) Cushing, F. H.: Outlines of Zuni Creation Mythes. *Thirteenth Annual Report of the Bureau of Ethnology*, 1891.
- (c) Id. Preliminary Notes. *Report of the Congress of Americanists*; Berlin, 1890.
- (d) Bandelier, A. F.: Historical Introduction. *Archæological Institute of America*, 1881.
- (e) Id. Investigations. Same report, 1882.
- (f) Id. Historical Archives of the Hemenway Southwestern and Archaeological Expedition. *Report of the Congress of Americanists*; Berlin, 1890.
- (g) Id. Documentary History of the Zuni Tribe. *Journal of American Ethnology and Archaeology*; Vol. III, 1892.
- (h) Id. Final Report; Part II, 1892.
- (i) Winship, G. P.: The Coronado Expedition. *Fourteenth Annual Report of the Bureau of Ethnology*, Part II, 1892.
- (j) Hodge, F. W.: The First Discovered City of Cibola. *American Anthropologist*, April 10, 1895.
- (k) Mindeleff, V.: A Study of Pueblo Architecture. *Eighth Annual Report of the Bureau of Ethnology*, 1891.

15. THE RIO VERDE DISTRICT.

- (a) Mindeleff, Cosmos: Aboriginal Remains in the Verde Valley. *Thirteenth Annual Report of the Bureau of Ethnology*, 1891.
- (b) Fewkes, J. W.: Archaeological Expedition to Arizona in 1895. *Seventeenth Annual Report of the Bureau of Ethnology*, 1898.
- (c) Mearns, E. A.: Ancient Ruins of the Rio Verde Valley. *Popular Science Monthly*, October, 1890.

16. THE SAN CARLOS DISTRICT.

- (a) Bandelier, A. F.: Final Report, Part II, 1892.
- (b) Hough, Walter: Museum-Gates Expedition, 1901.

17. THE LOWER GILA DISTRICT.

- (a) Fewkes, J. W.: Report on Casa Grande. *Journal of American Ethnology and Archaeology*, Vol. 11.
- (b) Mindeleff, Cosmos: The Casa Grande Ruin. *Thirteenth Annual Report of the Bureau of Ethnology*, 1891.
- (c) Bandelier, A. F.: Final Report, Part II.
- (d) Cushing, F. H.: Preliminary Notes on the Hemenway Expedition. *Report of Congress of Americanists*, Berlin, 1890.
- (e) Hodge, F. W.: Prehistoric Irrigation in Arizona. *American Anthropologist*, July, 1893.

18. MIDDLE GILA DISTRICT.

- (a) Bandelier, A. F.: Final Report, Part II.
- (b) Fewkes, J. W.: Two Summers' Work in Pueblo Ruins.

19. THE UPPER GILA DISTRICT.

Bandelier, A. F.: Final Report, Part II.

20. THE SAN FRANCISCO RIVER DISTRICT.

Forthcoming report, by Dr. Walter Hough, National Museum.